CHAPTER 3

Planning the Site

When you complete this chapter, you will be able to:

- Create a site specification document
- Identify a content goal
- Create a user-focused site by analyzing your audience
- Consider the different roles and talents necessary to build a site
- Create naming conventions for your site files
- Build a relative file structure that is portable to different Web servers
- Create a flowchart that depicts the structure of your information design

When faced with the daunting task of building or restructuring a Web site, many designers simply do not know where to begin. Rather than rushing straight to the computer, the best way to start is by picking up a pencil and paper and sketching out your site design. This chapter walks you through the planning process, allowing you to set a framework for development, resulting in less recoding when you actually sit down at the computer.

CREATE A SITE SPECIFICATION

Determine what your objectives are for building a Web site. You may want to increase communication among employees, gain visibility, provide a service, attract new customers, or simply show the world you can code HTML. Properly maintained Web sites take a lot of work. Make sure you have a valid justification for building your site, other than just to say that you have a Web site.

Start your planning by creating a **site specification**, which is the design document for your site. If you followed the exercises at the end of Chapter 1, you created a basic draft of a project proposal. You can use some of that information in your site specification. After you read this chapter, you will be able to answer a number of additional questions about your site. You can return to the site specification as you build your site to help maintain your focus. Answer the following questions in your site specification:

- Why are you building the Web site? Can you write a two or three-paragraph mission statement that briefly states the site's goals?
- What do you envision as the goal of the site? What do you or your company or organization hope to gain from creating and maintaining a Web site?
- How will you judge the success of the site? What are the measuring factors you can use to assess the effectiveness of the site?
- Who is the target audience? What characteristics do they share? How will you find out more about them?
- What are the limiting technical factors affecting your site?

IDENTIFY THE CONTENT GOAL

Examine closely what type of site you are building. Your objectives and your users' objectives—what you want the Web site to accomplish and what your users want from your site—may differ. For example, site designers often are more concerned with the visual aspects of a Web site, such as the quality of the graphics and the use of animation. Your users probably care more about how quickly they can find information. Adopt your user's perspective. Think about the type of content you are presenting and look to the Web for examples of how best to present it. The following types of Web sites demonstrate ways to focus your content.

- Billboard — These sites establish a Web presence for a business or commercial venture. In many cases they are informational and offer no true Web-based content, acting as an online brochure rather than offering Web-based interaction. Many businesses build this type of site first, then slowly add functions such as online ordering and product demonstrations as they become more comfortable with the medium.
- Publishing — Most major newspapers and periodicals now boast an online counterpart. These are some of the most ambitious sites on the Web in the breadth and depth of content they contain. Sites of this type usually contain multiple levels of information with many page templates.

Many publishing sites use special software that enables them to publish Web pages by drawing the content from the same databases as the paper-based versions. This allows their authors to write the article once, but have it published to multiple destinations, such as the daily newspaper and the Web site.

- Special interest, public interest, and nonprofit organization — These sites include news and current information for volunteers, devotees, novices, a specific audience, or the general public. No matter what your special interest, there is a Web site devoted to it. Public service Web sites contain links, information, downloadable files, addresses, and telephone numbers that can help you solve a problem or find more leads. Nonprofit organizations can state their manifesto, seek volunteers, and foster a grass-roots virtual community.
- Virtual gallery — The Web is a great place to show off samples of all types of art and design. Photographers and artists can display samples of their work. Musicians can post audio files of their songs. Writers can offer sections of text or complete manuscripts. Keep in mind that any copyrighted material you display on a Web site can be downloaded to a user's machine without your permission. Software companies such as Digimarc (*www.digimarc.com*) offer digital watermarking technology that lets artists embed digital copyright information in their electronic files as a deterrent to piracy of proprietary content. This information cannot be seen or altered by the user.
- E-commerce, catalog, and online shopping — The Web has become a viable shopping medium that will continue to expand as more users improve their Internet access and learn to trust the security of online commerce. Web commerce already has begun to make inroads on traditional retailing, and it offers many advantages over mail-order shopping, such as letting the customer know immediately if an item is in stock. Other types of commerce on the Web include stock trading, airline ticketing, and auctions. Many software vendors offer turnkey systems that can integrate with existing databases to speed the development of a commerce site. A good e-commerce site provides users with quick access to the item they want, detailed product descriptions, and easy, secure ordering.
- Product support — The Web is a boon to consumers who need help with a product. Manufacturers can disseminate information, upgrades, troubleshooting advice, documentation, and online tutorials on their Web site. Companies that provide product help information on the Web often find that their customer support calls decrease. Software companies especially benefit from the Web. Users can download patches, upgrades, and use trial versions of software before they buy.
- Intranet and extranet — An **intranet** is a private computer network contained within an organization. An intranet works like the Internet, and many companies build Web sites that are accessible only to those who have access to their intranet. Additionally, many companies have telecom-

muting employees who need access to company policies, documentation, parts lists, pricing information, and other materials. These employees can be reached via an **extranet**, which is a part of the private intranet extended outside the organization using the Internet. Many organizations mandate a particular browser for employee use, making the Web designer's job a little bit easier, because they only have to code and test for one browser.

One type of trial software is **shareware**, programs that users download and use for a trial period. Users then can register the software for a relatively small fee compared to commercially produced software. Shareware usually is developed by individuals or very small software companies, so registering the software is important to support future development efforts. Some of the most popular and commonly used programs are shareware, such as WinZip, from Nico Mak Computing, Info. at *www.winzip.com*. WinZip lets you work with .ZIP archive files, which is the PC defacto standard for file compression and archiving. If you are sending or receiving files via email, you will need WinZip to compress and uncompress them. If you have a Macintosh, you can use Stuffit to compress your files. Stuffit Deluxe and Stuffit Lite, created by Aladdin Systems, Inc., are available in shareware versions at *www.aladdinsys.com*. If you are a PC user and someone sends you a Stuffit file, you can expand it with Aladdin's Expander program, which also is available freely at the Aladdin site. Shareware programs are readily available for you to try and buy, including all types of software that can help you with your Web site development. Two great shareware sites that have WinZip as well as hundreds of other programs are: Shareware.com (*www.shareware.com*) and The Ultimate Collection of Winsock Software (*www.tucows.com*).

ANALYZE YOUR AUDIENCE

If at all possible, analyze your audience and produce an **audience definition**, a profile of your average user. Contact your typical users or those who work with them and answer the following questions:

- What is it that users want when they come to your site?
- How can you attract them and entice them to return for repeat visits?
- What type of computer and connection speed does your typical visitor have?

Answering these questions is especially difficult when your medium is the Web. Your users may fit no common profile. There are other ways to gather information about them. One way is to create an online survey as part of your site. If possible, offer an incentive for filling out the survey, such as a product giveaway, T-shirt, or imprinted mouse pad. Figures 3-1 and 3-2 show a portion of an online survey from the Millipore Corporation.

FIGURE 3-1
Online survey part 1

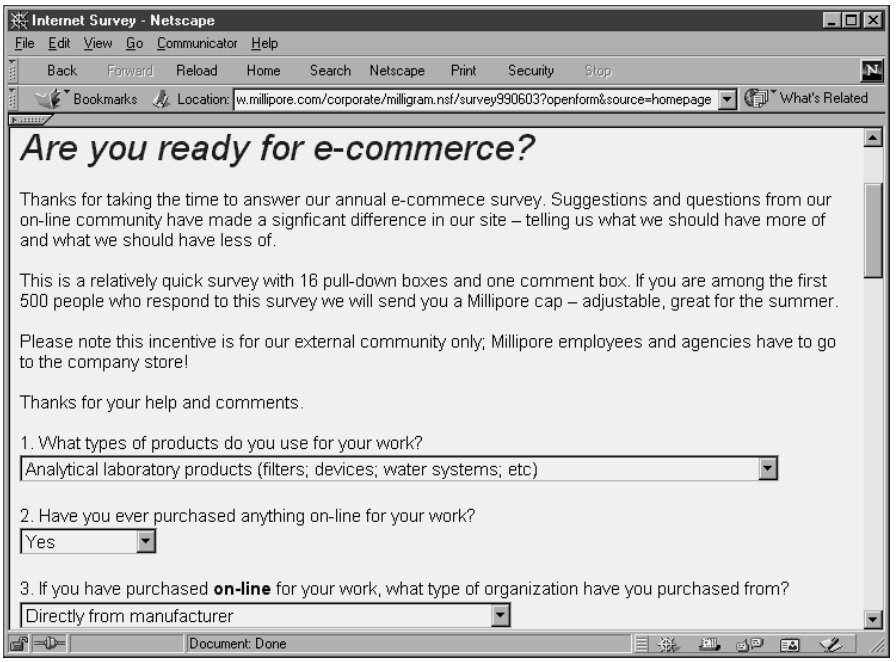
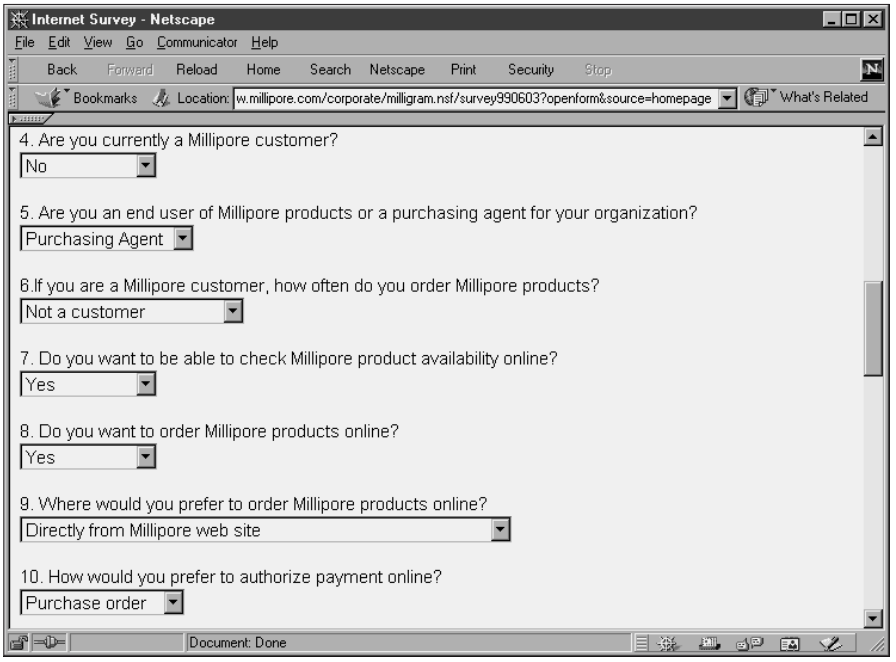


FIGURE 3-2
Online survey part 2



The questions survey Millipore's customers on whether they would purchase products online, and Millipore provides an incentive to fill out the form—they will send a baseball cap to the first 500 respondents. This is well

worth Millipore's investment if they get quality information from the survey results.

If you cannot survey your users, or if you feel you are not getting good survey results, adopt the user's perspective as you define your audience. Here are some questions to consider:

- Who are the typical members of your audience? Are they male or female? What level of education do they have? What is their reading and vocabulary level? What level of technical aptitude do they have?
- Why do people come to your site? Do they want information? Do they want to download files? Are they looking for links to other Web sites?
- Do you have a captive audience, such as a base of loyal customers that want up-to-date information? Are you designing for an intranet, where users are employees of an organization?
- Will other sites link to your site; or will your site provide links? If users unfamiliar with the site visit, will they know what you offer?
- How often will users return to your site? Do they have a reason to come back?
- What computing platform do your users have? What is their typical connection speed? What type of browser do they use? If you are on an intranet, is there a standard for browsers, connection, and screen resolution?
- Whose skills do you need to build the site? Who will create the graphics, code the pages, and write the text? Do you have the talent and economic resources that you need? Do they meet the expectations of your users?

Refine your content and presentation even after your site is built and running. Continue soliciting user feedback to keep your site focused and the content fresh.

IDENTIFY TECHNOLOGY ISSUES AND CONSTRAINTS

Make your best effort to identify any limiting or universal technological factors that are particular to your audience. For example, if the audience is anybody, the ubiquitous Web surfer, then you may have to design for the lowest common denominator, using less graphics and considering 640 x 480 as the base screen resolution. If you primarily have a high tech audience, a higher resolution or connection speed may apply. If you are designing an intranet site, you may have the luxury of knowing your users' exact operating systems and browser versions. Whatever the particulars, make sure to design at the correct level, or you will risk losing visitors.

BUILD A WEB SITE DEVELOPMENT TEAM

Although one person can maintain small Web sites, larger sites require a group of personnel filling a variety of roles. The line can be blurred between the roles, and of course, many aspects of site design require more than one head to solve a problem. The following roles are examples of the types of talent necessary to build a larger, well-conceived site.

- Server administrators — Get to know and appreciate the technical people that run your Web server. They take care of the sticky technical issues like

firewalls, modem ports, internal security, file administration, and back-up procedures. Consult with them to determine your Web site's default filename and directory structure. They also can generate reports that will tell you how many visitors your site is attracting, where the visitors are coming from, and what pages they like best.

- HTML coders — These are the people responsible for creating the HTML code and troubleshooting the site. Most HTML coders now are using HTML editors to create code, but any self-respecting HTML coder knows how to open the HTML file in a text editor and code by hand. The coders also are responsible for testing and evaluating the site across different operating systems and Web browsers.
- Designers — Designers are the graphic artists responsible for the look of the site. They will use design software, such as Adobe PhotoShop, the industry standard graphic design program. Designers contribute to the page template design, navigation icons, color scheme, and logos. If your site uses photographic content, the designers will be called upon to prepare the photos for online display.
- Writers and Information designers — Writers prepare content for online display, which includes designing hypertext information and navigation paths. Additionally, writers should be responsible for creating a site style guide and typographic conventions. The writers are responsible for consistency, grammar, spelling, and tone. They also work closely with the designers to develop the page templates.
- Software programmers — Programmers write the programs you need to build interaction into your site. They may write a variety of applications, including Common Gateway Interface (CGI) scripts, Java scripts, and back-end applications that interact with a database. Commerce sites will especially need the talents of a programming staff.
- Database administrators — The people who are responsible for maintaining the databases play an important role in commercial Web sites. They make sure that your data is accessible and safe.
- Marketing — The marketing department can generate content and provide exposure for the site.

FILENAMES AND URLS

Before you set your hands on the keyboard and mouse, plan your filenaming conventions for your site. Talk to your system administrator and find out what type of operating system your Web server uses. Typically you will develop your Web site locally on a PC or Macintosh, and then upload the files to the Web server as the last step in the publishing process. If the Web server runs an operating system different from your local development system, transferring your files to the server may break local URL links because of either filename or directory structure inconsistencies.

FILE NAMING

The maximum length of the filename, valid characters and punctuation, and sensitivity to uppercase and lowercase letters all vary among operating systems as described in Table 3-1.

TABLE 3-1
File naming conventions

Operating System	File Naming Conventions
ISO 9660 standard	The filename consists of a maximum of eight letters followed by a period and a three-letter extension. Allowed characters are letters, numbers, and the underscore (_).
DOS and Windows 3.x (FAT file system)	The same as ISO 9660 but with these additional characters allowed: $ % ' ` - @ ^ ! & [ ] ( ) #
Microsoft Windows/NT, NTFS, and Windows 95 VFAT, Windows 98 FAT32	Maximum 255 letters, all characters allowed except: \ / * " < > |
Macintosh	Maximum 31 letters, all characters allowed except the colon (:)
UNIX	Maximum 255 letters, all characters allowed except the forward slash (/) and spaces

Case Sensitivity

If you have an image file named Picture.gif, for example, and you reference that file as <IMG SRC="picture.gif">, the image will display properly on a Macintosh or Windows machine. On a UNIX server, however, the image will not load properly because UNIX is case-sensitive. To a UNIX machine, Picture.gif and picture.gif are two different files. It is best always to use lowercase letters for all filenames. Remember to use lowercase letters in filenames in your HTML code as well.

Character Exceptions

Character use also is incompatible between operating systems. For example, the filename *my stuff.htm* is valid on a PC or Macintosh, but not on a UNIX machine because of the space in the filename. If you transfer a Web site containing *my stuff.htm* to a UNIX server, the links to the file will not work. As another example, the filename <section2>.htm is valid on a Macintosh or UNIX machine, but if you transfer the files to a Windows NT server the <> characters are not allowed. It is best when naming your files to leave out special characters such as /, \, &, *, and blank spaces.

File Extensions

Use the correct file extensions to identify your file to the browser. HTML text files must end in .htm or .html. Be careful to add this extension when you are working in Notepad, which defaults to saving as .txt. You also must correctly specify image file formats in the file extensions. Joint Photographic Experts

Group (JPEG) files must end in .jpg or .jpeg. Graphics Interchange Format (GIF) files must end in .gif. Portable Network Graphic (PNG) files must end in .png.

Solving the Filename Dilemma

The best way to overcome the restrictions of case sensitivity, character exceptions, and file extensions is to use the convention specified by the International Standards Organization (ISO) for all your files. This convention (often called eight-dot-three) specifies a maximum of eight letters followed by a period and a three-letter extension. Allowed characters are letters, numbers, and the underscore character. Thus a filename in 8.3 means an eight-letter filename with a three-letter file extension. Here are some examples:

- mypage.htm
- chap_1.htm
- picture1.jpg
- logo.gif

If you use the 8.3 file naming convention on your development system, you will have little or no filename problems when you transfer your files to the Web server, regardless of the server's operating system. By sticking with this filename format, you ensure that your files will be portable across the greatest number of operating systems. Do not forget to use lowercase characters, and omit special characters from your filenames to ensure compatibility.

The Default Main Page Name

Every Web site has a default main page that displays when the browser requests the directory of the site rather than a specific file. This is indicated by a trailing slash in the URL, such as *http://www.mysite.com/*. In this instance the Web server provides the index file, which usually is named index.htm. Windows NT, however, defaults to an index filename of default.htm, and other servers may be set to other names such as main.htm or home.htm. Before you start coding, check with your system administrator to verify the main page filename.

TIP

When you are browsing the Web, you do not need to enter the protocol because the browser defaults to http://. However, in your code you must always include the protocol with a complete URL, otherwise the browser will not know how to connect to the location you specify.

URL USAGE

Although you may know that URLs are the addresses you type into your browser to access a site, you may not realize that there are two types of URLs: complete and partial.

Complete URLs

A **Uniform Resource Locator (URL)** is the unique address of a file's location on the World Wide Web. A **complete URL** includes the protocol the browser uses to access the file, server or domain name, the relative path, and the filename. Figure 3-3 shows an example of a complete URL.

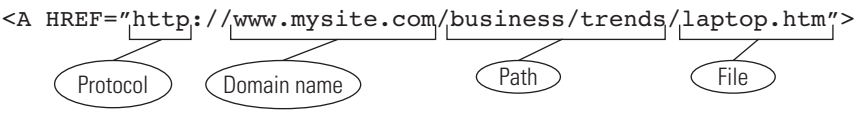


FIGURE 3-3
Parts of a complete URL

In this example, *http* is the protocol, and *www.mysite.com* is the domain name. The path shows that the destination file, *laptop.htm*, resides in the *business/ trends* folder. Use complete URLs in your HTML code when linking to another server. Use partial URLs when you link to files within your own site.

Partial URLs

Use a partial URL when you are linking to a file that resides on your own computer. **Partial URLs** omit the protocol and domain or server name, and specify the path to the file relative to one another on the same server. Files that reside in the same directory need no path information other than the filename. The following code shows an example of a partial URL.

```
<A HREF="laptop.htm">link text</A>
```

DIRECTORY STRUCTURE

When you complete your site, you will publish your files on the Web by transferring them to a Web server. A typical Web server has a user area that contains folders for each user. Your files are stored in your user area, along with other files from other Web sites stored in their respective user areas. The directory structure of the Web server affects the format of your site's URL.

Figure 3-4 shows a typical Web server directory structure. If you do not buy a domain name for your site, you will have a URL that reflects your path in the public area of the Web server. A user enters the following address in the browser to access User 2's Web site: *www.Webserver.com/user2/*.

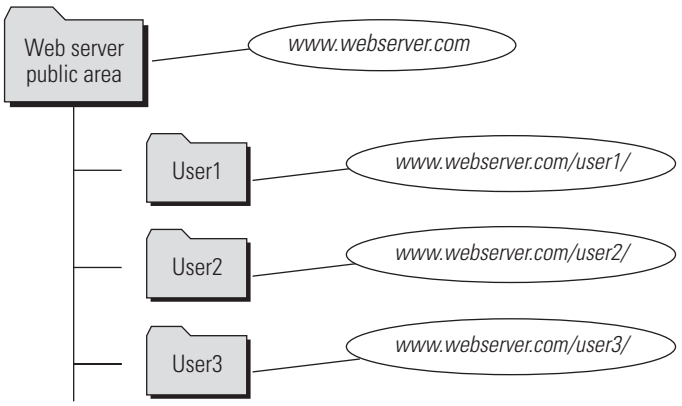


FIGURE 3-4
Typical Web server directory structure

When you buy a domain name, the name you choose is an alias that points to your actual location on the Web server, as shown in Figure 3-5. User 2 has purchased *www.mysite.com* for a domain name. The actual path to User 2's content has not changed, but the visitor to the site only sees the domain name. Now User 2 can advertise the Web site with an easy-to-remember URL.

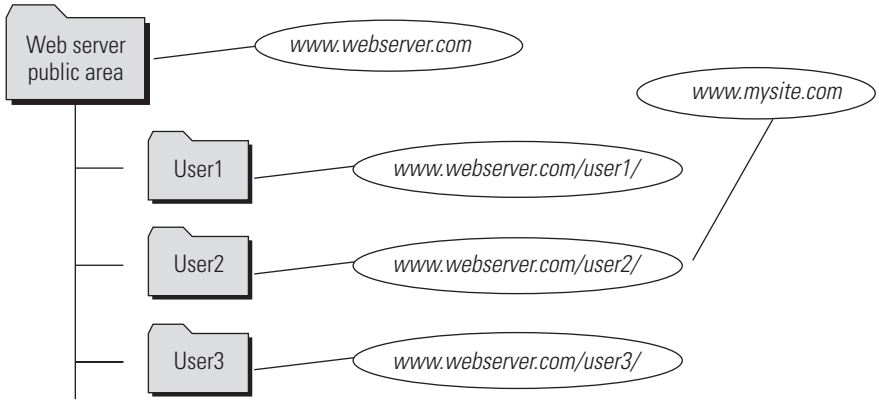


FIGURE 3-5
Domain name hides the actual path

TIP

If you want to see if a domain name is available, or to register your own domain name, visit Network Solutions at *www.networksolutions.com*. Network Solutions is the company responsible for registering .com, .net, and .org domain names, and works in cooperation with the U.S. government. Over five million business and personal domain names are currently registered. The site contains a simple form that lets you enter the domain you want to see if it is already registered.

RELATIVE VERSUS ABSOLUTE PATHS

You most likely will build your Web site on a computer that is different from the computer that will be hosting your site. Keep this in mind when you are designing the directory and file structure. Because your files will be transferred to another computer, any URLs you specify to link to other pages in your site must include paths that are transferable. This is why you should never specify an absolute path in your partial URLs. An absolute path points to the computer's root directory. The root directory is indicated by a leading slash in the file path:

```
/graphics/logo.gif
```

If you include the root directory in your partial URLs, you are basing your file structure on your development machine. If the files are moved to another machine, the same path to your files will not apply, and your site will include links that do not work because the browser cannot find the files.

Relative paths tell the browser where a file is located relative to the document the browser currently is viewing. Because the paths are not based on the root directory, they are transferable to other computers.

BUILDING A RELATIVE FILE STRUCTURE

Take a closer look at the relative file structure for User 2's Web site as depicted in Figure 3-6. Notice that User 2's Web folder contains three HTML files and two subfolders. The two subfolders, *graphics* and *pictures*, contain the graphics and pictures for the Web site.

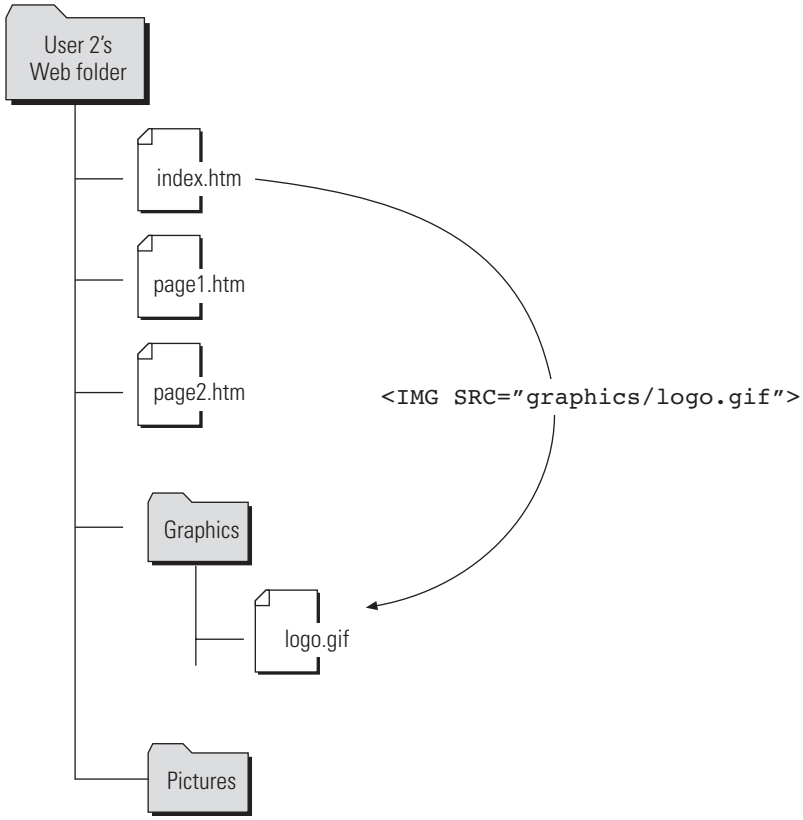


FIGURE 3-6
Relative file structure

To include the file logo.gif in index.htm, User 2 adds the following code to index.htm:

```
<IMG SRC="graphics/logo.gif">.
```

The path in the SRC value tells the browser to look down one level in the directory structure for the graphics folder and find the file logo.gif. The path to the file is relative to the file the browser is viewing. This type of relative file structure can be moved to different machines—the relationship between the files will not change, because everything is relative within the Web folder.

Of course, the easiest way to ensure that all your path names are correct is to keep all of your HTML and image files in the same directory. Because all files are kept together, the only information you need to put in the SRC or HREF attribute is the filename itself. In Figure 3-7, User 2 has simplified the directory structure. To reference the file logo.gif, User 2 adds the following code in one of the HTML files:

```
<IMG SRC="logo.gif">.
```

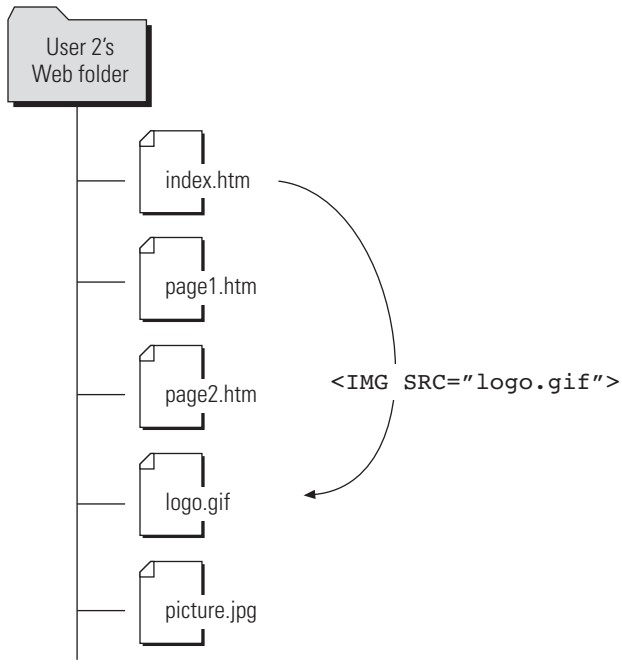


FIGURE 3-7
Simplified single folder file structure

DIAGRAM THE SITE

Plan your site by creating a flowchart that shows the structure and logic behind the content presentation and navigation choices you offer. You can sketch your site with paper and pencil or create it using flowcharting software. Sometimes it is helpful to use sticky notes or cards to plan the structure visually. This method lets you easily move pages from one section or level to another. Whichever method you choose, this preliminary planning step is one of the most important that you take in planning your site. You can move pages and whole sections of content freely, plan navigation paths, and visualize the entire site. This is the time to experiment. Once you have started coding the site it will be much more difficult and time consuming to go back and make major changes. Remember to create and stick to the filenaming conventions for each of your pages as well.

CREATE THE INFORMATION STRUCTURE

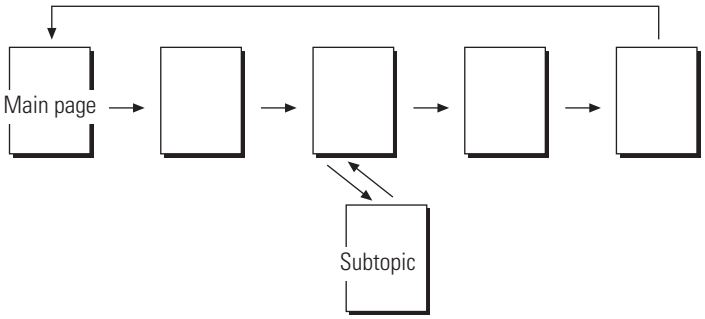
Think about the information needs of your users and how they can best access the content of your site. Consider what your information design map should look like. Look through the sample structures provided in this section and judge how well they fit the needs of your information. Your design may incorporate several different structures, or you may have to adapt the structures to your content. Each sample structure is a representation. You may have more or fewer pages, sections, topics, and links. You may choose to use bidirectional

links where only single-direction links are indicated. Use these examples as starting points and design from there.

Linear Structure

The linear information structure, illustrated in Figure 3-8, lets you guide the user along a path. This structure lends itself to book-type presentations, or content that requires the user to follow a predefined path. Once into the content, users can navigate backwards or forwards within the content path. Each page can contain a link back to the main page if desired. Pages may contain links to a related subtopic. If the users jump to the subtopic page, they only can return to the page that contains the subtopic link. This structured navigation returns them to the same point in the content path.

FIGURE 3-8
Linear information structure



Tutorial Structure

The tutorial structure illustrated in Figure 3-9 is perfect for computer-based training content such as lessons, tutorials, or task-oriented procedures.

The tutorial structure builds on the simple linear structure in Figure 3-8. The user navigates in a linear manner, progressing through the concept, lesson, and review pages in order. Because the lesson exists in hypertext, users can leave the lesson structure and return at any time. They also can choose the order of lessons, and start at any main concept point they wish. Notice that the table of contents, index, and site map pages are linked to and from all pages in the course. Within each lesson users can navigate as necessary to familiarize themselves with the content before they review. This structure can be adapted to fit the content needs. For example, the group of pages in the illustration could be one section of a larger training course.

Web Structure

Many smaller Web sites follow the content structure illustrated in Figure 3-10, which offers links to and from every page in the site. This allows the user to jump freely to any page from any other page. If you build a Web type of content structure, make sure to include on each page clear location information and a standardized navigation bar that not only tells the user where they are, but where they can go.

FIGURE 3-9
Tutorial structure

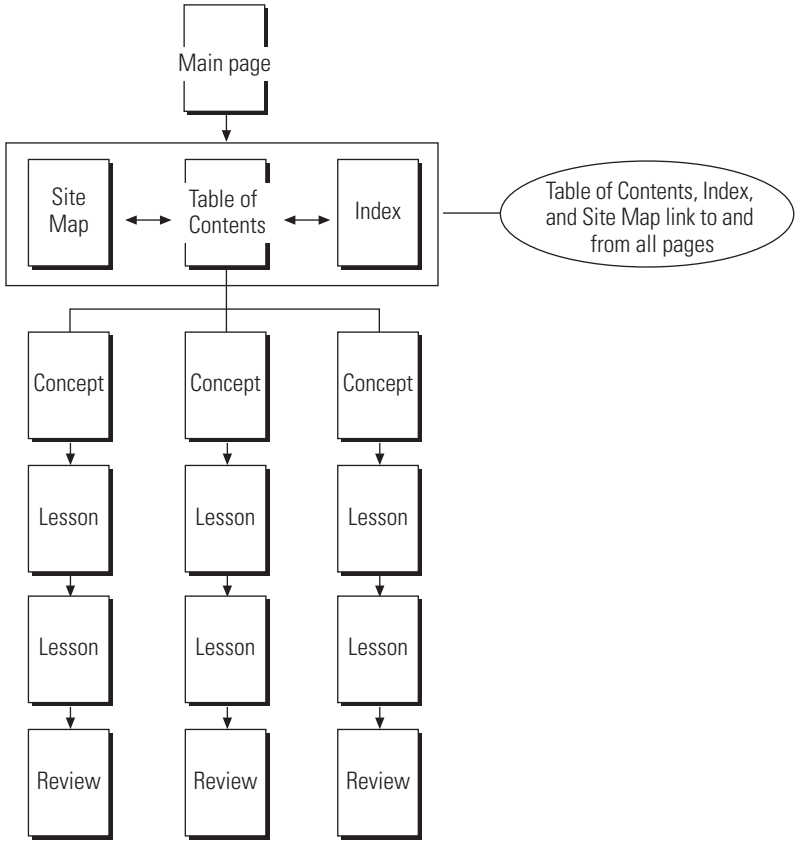
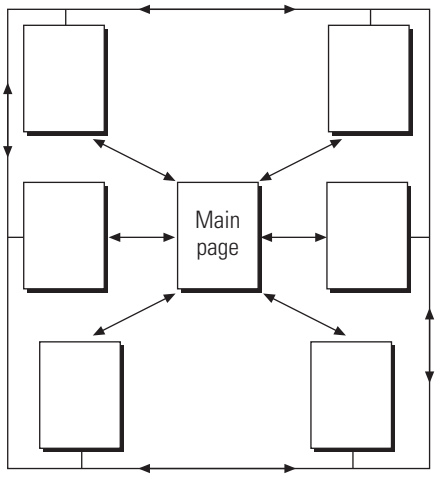


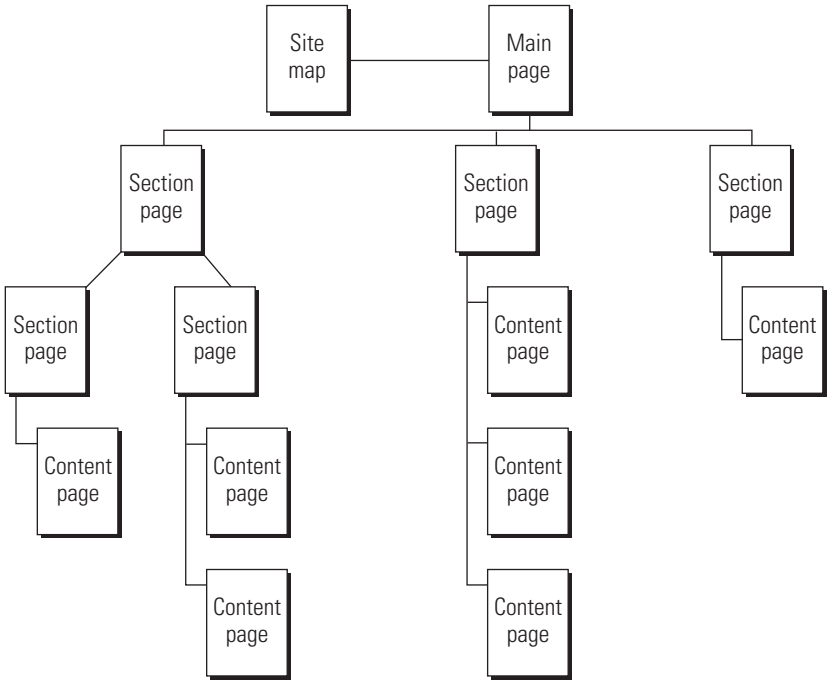
FIGURE 3-10
Web structure



Hierarchical Structure

The hierarchical structure illustrated in Figure 3-11 is probably the most common information design. It lends itself to larger content collections because the section pages break up and organize the content at different levels throughout the site. Navigation primarily is linear within the content sections. Users can scan the content on the section page and then choose the content page of their choice. When they finish reading the content, they can return to the section page. The site map allows users to navigate freely throughout the site. Include a navigation bar on each page that lets the user jump to any section page, the main page, and the site map.

FIGURE 3-11
Hierarchical structure



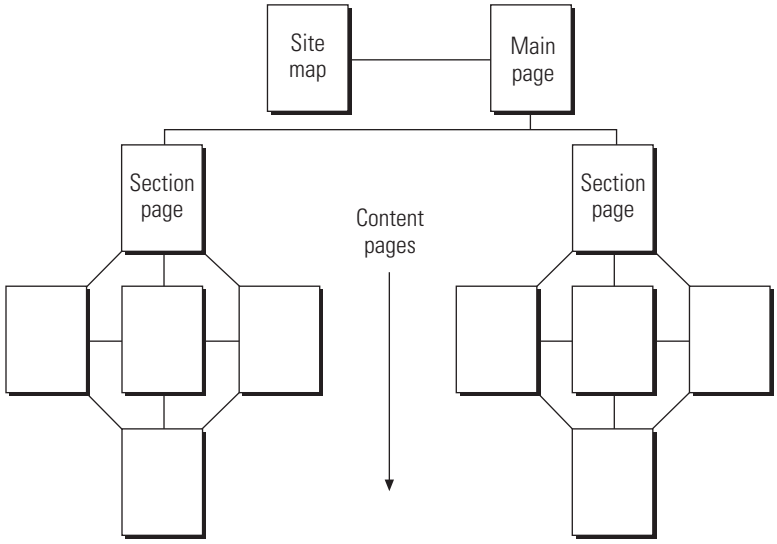
Cluster Structure

The cluster structure illustrated in Figure 3-12 is similar to the hierarchical structure, except that every topic area is an island of information unto itself, with all pages in each cluster linked to each other. This structure encourages exploration within a topic area, allowing the user to navigate freely through the content. All pages contain a navigation bar with links to the section pages, main page, and site map.

Catalog Structure

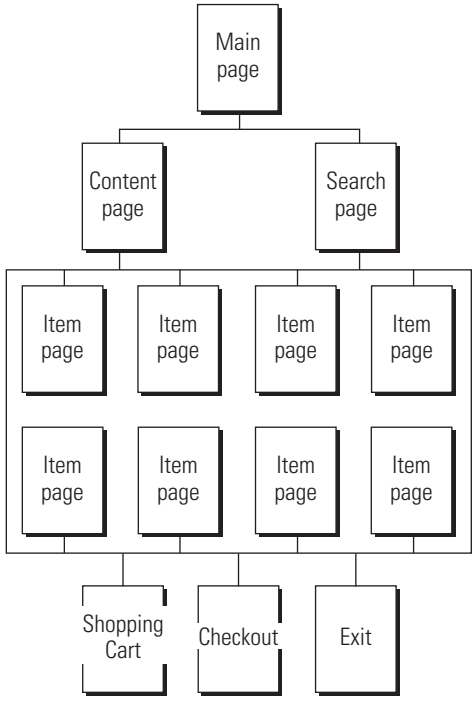
The catalog structure illustrated in Figure 3-13 accommodates electronic shopping. The user can browse or search for items and view specific information about each product on the item pages. Users can add items to their shopping cart as they shop. When they are finished, they can review the items in their shopping cart, and then proceed to checkout, where they can enter credit card information and finalize the order.

FIGURE 3-12
Cluster structure



This type of Web site requires sophisticated back-end transaction processing to handle the shopping cart tally, process credit card information, and generate an order for the warehouse. Businesses that want to set up an electronic commerce site can purchase ready-made commerce software packages or develop their own from scratch.

FIGURE 3-13
Catalog structure



SUMMARY & REVIEW

A successful Web site is the result of successful planning. The steps you take before you actually start coding the site will save you time, energy, and expenses in the long run. Remember these points of successful planning:

- Start with pencil and paper. Your ideas will be less restricted and you easily can revise and recast without recoding.
- Write a site specification document. You will find it invaluable as a reference while building your site.
- Identify the content goal by adopting your user's perspective and learning what they expect from your site.
- Analyze your audience and create an audience profile. Focus your site on the user's needs, and continue to meet those needs by adapting the site based on user feedback.
- An effective site is more commonly the result of a team effort. Leverage different skill sets and experience to build a Web site development team.
- Plan for successful implementation of your site by creating portable file naming conventions. Build a relative file structure that can be transferred to your Web server without a hitch.
- Select a basic information structure for your site and then manually diagram it, customizing as you develop the best structure for your site.

REVIEW QUESTIONS

1. List three technology constraints that can affect the way a user views your Web site content.
2. Consult with your Web server administrator when you need to determine the _____ and _____ for your site.
3. Name two inconsistencies that can cause broken links when you upload your files to a Web server.
4. List three characteristics of filenames that vary by operating system.
5. The international standard for filenames often is called _____.
6. Which computer operating system is case-sensitive?
7. Rename the following files so that they are compatible across all operating systems:
   My file.htm _____
   case:1.htm _____
   #3rdpage.htm _____
8. What is the default main page name for a Web site?
9. What are the two types of URLs?
10. What are the four parts of a complete URL?
11. What type of URL links to another server?
12. What type of URL links within a server?
13. What affects the format of the URL for your Web site?
14. What is the benefit of purchasing a domain name?
15. What symbol indicates an absolute path?

16. Why should you never specify an absolute path in partial URLs?
17. What is the benefit of building a site with relative paths?
18. Files that reside in the same directory need only the _____ to refer to each other.
19. List two benefits of diagramming your site before you start coding.

PROJECTS

1. Browse the Web and find a site you like. Write a mission statement for the Web site that briefly states the site's goals.
2. Browse the Web and find Web sites that fit the following content types:
   a. Billboard
   b. Publishing
   c. Special interest
   d. Product support

   Write a short summary of how the content is presented at each Web site and describe how the site focuses on its users needs.
3. Browse the Web and find a site that does not contain a user survey form. Write a 10-15 question user survey that you would use on the site. Tailor the questions to the site's content and goals.
4. Find a billboard type of Web site. Write an analysis of the site that includes functions and features you would add to extend the site's effectiveness for its users.
5. Visit *www.winzip.com* and download the latest version of WinZip. If you have a Mac, visit *www.aladdinsys.com* and download the shareware version of Stuffit.
   a. Read the product documentation and install the program on your computer.
   b. Find a document that you have created in your word processing software. Note the file size.
   c. Compress the file. Note the new file size.
6. Browse the Web to find examples of the following site structures and describe how the content fits the structure:
   a. Linear
   b. Hierarchical
7. Browse the Web to find a site that uses more than one structure type and describe why you think the site's content benefits from multiple structures.
8. Are there other structure types that are not described in this chapter? Find a site that illustrates a different structure content. Flowchart the site and determine why it benefits from the different structure type.

CASE STUDY

Write a site specification for the site you defined in Chapters 1 and 2. Include as much information as possible from the project proposal you completed at the end of Chapter 1. Make sure to include a mission statement that defines the goals for the site. Determine how you will measure the site's success in meeting its goals. Include a description of the intended

audience. Describe how you will assess user satisfaction with the site. Include technological issues that may influence the site's development or function.

Prepare a detailed flowchart for your site using the preliminary flowchart you created at the end of Chapter 2. Create a filename for each page that matches the ISO 9660 standard. Indicate all links between pages. Write a short summary that describes the flowchart. Describe why you chose the particular structure, how it suits your content, and how it benefits the user.